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COPY 1 OF 3WESTINGHOUSE
ELECTRIC CORPORATIONFRIENDSHIP
INTERNATIONAL AIRPORT
BALTIMORE, MD.

*

21 December 1956

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Subject: Terrain Avoidance Proposal

Reference: AAN-30342

*Superseded
w/ proposal
dated 22 Jan 57.*

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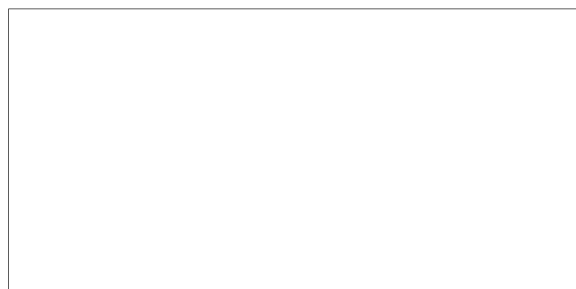
In connection with the work proposed in our proposal for Terrain Avoidance Systems presented to [redacted] approximately one month ago, Westinghouse proposes the following items of work:

- Item (1) Study phase to result in detailed specifications of the Terrain Avoidance Equipment.
- Item (2) Develop, fabricate and perform roof top tests of a breadboard model.
- Item (3) Fabricate one developmental flyable model.
- Item (4) Flight test of breadboard model fabricated under Item 2.

Delivery is quoted as follows:

- Item (1) One month after go ahead.
- Item (2) Eight and one-half months after go ahead.
- Item (3) Thirteen months after go ahead.
- Item (4) Concurrent with Item (2).

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The delivery of Items (2) and (3) is predicated on no delay being incurred in the approval of the detailed specifications developed under Item (1).

Item (4) is proposed as optional additional testing of the breadboard model. If the flight tests are not procured, additional roof top tests will be performed such that the overall delivery of Item (2) will be in eight and one-half months after go ahead regardless of whether flight tests are included.

The proposal for Item (4) is based on bailment of the B-17G aircraft now assigned to Contract AF33(616)3248. It is to be noted that this aircraft has been modified under the referenced Air Force contract for flight test of a Terrain Avoidance System similar to the one herein proposed. Relatively little aircraft modification would therefore be required. Bailment of this aircraft to this proposed program is requested by March 1957 for a period of six (6) months. In addition, it is proposed that the Government will furnish the gasoline and oil supplies required; it is estimated this flight test program will require 12,500 gallons of gasoline and 50 gallons of lubricating oil.

Item (4) includes the maintenance of the bailed aircraft for the six month period required, installation of the breadboard system, and services and materials required for a forty hour flight test program. Upon completion of the flight test program Westinghouse proposes to restore the aircraft only to the extent necessary to satisfy flight safety requirements following removal of the breadboard equipment.

For this effort, a fixed price quotation, subject to redetermination, as outlined in Contract FL-3011, of \$632,944 is submitted. This quotation includes profit based on 7% of the estimated cost. Considering the nature of the work involved, it is proposed that redetermination be planned upon completion of Item 2. It is acceptable to include this work as an amendment to Contract FL-3011.

Sincerely,


Sales Engineer

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COST ANALYSIS

~~TOP SECRET~~~~TOP SECRET~~

GENERAL - This analysis includes:

Description

1. ☒ Estimated cost for bid Terrain Avoidance System
2. ☐ Entire Contract Item No. 1 - Study
3. ☒ G.O. or Neg. No AAN-30342 Contract No. Bid Date 12/19/56

COST ANALYSIS

A Direct Cost

Dollar Amount

- (1) Direct Material \$ 525
- (2) Model Shop Labor
- (3) Model Shop Overhead (% of Item 2)
- (4) Engineering Labor 1,200 hrs @ 3.70 4,440
- (5) Engineering Overhead (63.9 % of Item 4) 2,837
- (6) Drafting Labor
- (7) Drafting Overhead (% of Item 6)
- (8) Other Items of Direct Cost (Specify)
- (9) Subtotal - Items of Direct Cost \$ 7,802

B. General and Administrative Expense

(12.6 % of Item A (9) 983

C. Estimated

8,785D. ~~Estimated~~ Profit (7.0 % of Item C)615E. Other Contract Performance Cost Total Estimated Cost, including ~~Estimated~~ Profit \$ 9,400

This is to certify that the information contained in this report has been compiled from the records and books of this Company (or if covering a bid estimate, is based on such books and records), and to the best of our knowledge and belief, the costs and expenses shown hereon are correctly stated.

WESTINGHOUSE ELECTRIC CORPORATION

Date December 19, 1956

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COST ANALYSIS~~TOP SECRET~~

GENERAL - This analysis includes:

Description _____

1. ☒ Estimated cost for bid Terrain Avoidance System
2. ☐ Entire Contract _____ Item No. 2 - Breadboard Model
3. ☒ G.O. or Neg. No. AAN-30342 Contract No. _____ Bid Date 12/19/56

COST ANALYSIS

A Direct Cost

Dollar Amount

- | | | |
|---|----|---------|
| (1) Direct Material | \$ | 61,950 |
| (2) Model Shop Labor 4,000 hrs @ 2.52 | | 10,080 |
| (3) Model Shop Overhead (105.8% of Item 2) | | 10,665 |
| (4) Engineering Labor 13,400 hrs @ 3.33 | | 44,622 |
| (5) Engineering Overhead (63.4 % of Item 4) | | 28,290 |
| (6) Drafting Labor | | |
| (7) Drafting Overhead (____ % of Item 6) | | |
| (8) Other Items of Direct Cost (Specify) | | |
| (9) Subtotal - Items of Direct Cost | \$ | 155,607 |

B. General and Administrative Expense

(12.6 % of Item A (9)		19,606
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C. Estimated

175,213

D. Profit

D. ~~Fixed Fee~~ (7.0 % of Item C)

12,265

E. Other Contract Performance Cost

Total Estimated Cost, including Profit ~~Exclusion~~

\$ 187,478

This is to certify that the information contained in this report has been compiled from the records and books of this Company (or if covering a bid estimate, is based on such books and records), and to the best of our knowledge and belief, the costs and expenses shown herein are correctly stated.

WESTINGHOUSE ELECTRIC CORPORATION

Date December 19, 1956

By _____

Sales Dept.

COST ANALYSIS

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~~COST PRICE FIXED FIRM CONTRACTS~~

GENERAL - This analysis includes:

Description

1. ☒ Estimated cost for bid Terrain Avoidance System
2. ☐ Entire Contract _____ Item No. 3 - Flyable Developmental Model
3. ☒ G.O. or Neg. No. AAN-30342 Contract No. _____ Bid Date 12/19/56

COST ANALYSIS

A Direct Cost	Dollar Amount
(1) Direct Material	\$ 65,100
(2) Model Shop Labor 8,000 hrs @ 2.52	20,160
(3) Model Shop Overhead (<u>105.8%</u> of Item 2)	21,329
(4) Engineering Labor 22,400 hrs @ 3.40	76,160
(5) Engineering Overhead (<u>63.5%</u> of Item 4)	48,362
(6) Drafting Labor 8,800 hrs @ 2.50	22,000
(7) Drafting Overhead (<u>58.8%</u> of Item 6)	12,936
(8) Other Items of Direct Cost (Specify)	
(9) Subtotal - Items of Direct Cost	\$ 266,047
B. General and Administrative Expense	
(<u>12.6</u> % of Item A (9))	33,522
C. Estimated	299,569
D. Profit ^{Profit} (<u>7.0</u> % of Item C)	20,970
E. Other Contract Performance Cost	
Total Estimated Cost, including Profit ^{Profit}	\$ 320,539

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WESTINGHOUSE ELECTRIC CORPORATION

Date December 19, 1956

By

Sales Dept.

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